

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

Patent No.:

Filed:

Issue Date:

Title:

Commissioner for Patents
Washington, D.C. 20231

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST
(REVOCATION OF PRIOR POWERS)

As assignee of record of each of the patents listed in the table of attachment A,

REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given in each of the listed patents are hereby revoked, and

NEW POWER OF ATTORNEY

the following attorneys/agents are hereby appointed to prosecute this patent/application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this patent/application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number:

15650

Patent Trademark Office

Please direct all future correspondence and telephone calls to:

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ASSIGNEE OF ENTIRE INTEREST

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5300 California Avenue
Irvine, California 92617-3038

ASSIGNEE CERTIFICATION

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same. Further, in my official position with Broadcom Corporation, I am authorized to sign documents and otherwise act on its behalf in connection with the management and handling of patent applications and other intellectual property matters.

Date: 9/12/11


Dee Henderson
Director - Intellectual Property Administration
Broadcom Corporation

ATTACHMENT A

| No. | Patent No. | BD No. | Patent Title | Issue Date | Assignment to BD (Reel/Frame) |
|-----|------------|------------|--|------------|----------------------------------|
| 1 | 7,054,805 | BU2689 | METHOD AND SYSTEM FOR ALLOCATING MEMORY DURING ENCODING OF A DATASTREAM | 5/30/2006 | 013991/0706 |
| 2 | 7,301,902 | BU2775 | GENERIC ON-CHIP HOMING AND RESIDENT, REAL-TIME BIT EXACT TESTS | 11/27/2007 | 014060/0087 |
| 3 | 7,680,042 | BU2775D1C1 | GENERIC ON-CHIP HOMING AND RESIDENT, REAL-TIME BIT EXACT TESTS | 3/16/2010 | 022588/0679 |
| 4 | 7,149,305 | BU2900 | COMBINED SIDETONE AND HYBRID BALANCE | 12/12/2006 | 014129/0728 |
| 5 | 7,528,889 | BU2922C1 | SYSTEM, METHOD, AND APPARATUS FOR DISPLAYING STREAMS WITH DYNAMICALLY CHANGING FORMATS | 05/05/2009 | 013980/0291 |
| 6 | 7,190,775 | BU2923 | HIGH QUALITY AUDIO CONFERENCING WITH ADAPTIVE BEAMFORMING | 3/13/2007 | 014331/0522 |
| 7 | 7,116,742 | BU1225C1 | TIMING RECOVERY SYSTEM FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 10/3/2006 | 016450/0334 |
| 8 | 7,844,019 | BU1225C2 | TIMING RECOVERY SYSTEM FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 10/03/2006 | 016450/0334 |

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|-----|------------|----------|---|------------|----------------------------------|
| 9 | 7,535,836 | BU2746 | METHOD AND SYSTEM TO PROVIDE WORD-LEVEL FLOW CONTROL USING SPARE LINK BANDWIDTH | 5/19/2009 | 0014423/0227 |
| 10 | 7,542,465 | BU2788 | OPTIMIZATION OF DECODER INSTANCE MEMORY CONSUMED BY THE JITTER CONTROL MODULE | 6/2/2009 | 013755/0867 |
| 11 | 7,602,815 | BU2954 | USING NETWORK TIME PROTOCOL IN VOICE OVER PACKET TRANSMISSION | 10/13/2009 | 014199/0933 |
| 12 | 7,382,924 | BU3141 | PIXEL REORDERING AND SELECTION LOGIC | 6/3/2008 | 014252/0094 |
| 13 | 7,562,024 | BU3142 | STORING MACROBLOCKS FOR CONCATENATED FRAMES | 4/28/2009 | 015234/0736 |
| 14 | 7,970,262 | BU3149C1 | BUFFER DESCRIPTOR STRUCTURES FOR COMMUNICATION BETWEEN DECODER AND DISPLAY MANAGER | 06/28/2011 | 014217/0172 |
| 15 | 7,227,587 | BU2860 | SYSTEM AND METHOD FOR THREE DIMENSIONAL COMB FILTERING | 6/5/2007 | 014716/0211 |
| 16 | 7,113,221 | BU2862 | METHOD AND SYSTEM FOR CONVERTING INTERLACED FORMATTED VIDEO TO PROGRESSIVE SCAN VIDEO | 9/26/2006 | 014390/0879 |

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| 17 | 7,280,155 | BU2862C1 | METHOD AND SYSTEM FOR CONVERTING INTERLACED FORMATTED VIDEO TO PROGRESSIVE SCAN VIDEO | 10/09/2007 | 014390/0879 |
| 18 | 7,307,669 | BU2922 | SYSTEM, METHOD, AND APPARATUS FOR DISPLAYING STREAMS WITH DYNAMICALLY CHANGING FORMATS | 12/11/2007 | 013980/0291 |
| 19 | 7,574,059 | BU2931 | SYSTEM, METHOD, AND APPARATUS FOR PROVIDING MASSIVELY SCALED DOWN VIDEO USING ICONIFICATION | 8/11/2009 | 016291/0584 |
| 20 | 7,865,361 | BU2958 | VOICE QUALITY ANALYSIS TECHNIQUE | 1/4/2011 | 014147/0255 |
| 21 | 7,193,656 | BU3140.1 | LINE ADDRESS COMPUTER FOR PROVIDING COEFFICIENTS TO A CHROMA FILTER | 3/20/2007 | 014381/0066 |
| 22 | 7,301,582 | BU3140.2 | LINE ADDRESS COMPUTER FOR PROVIDING LINE ADDRESSES IN MULTIPLE CONTEXTS FOR INTERLACED TO PROGRESSIVE CONVERSION | 11/27/2007 | 014375/0019 |
| 23 | 7,702,021 | BU3159 | DECODING OF DIGITAL VIDEO STANDARD MATERIAL DURING VARIABLE LENGTH DECODING | 4/20/2010 | 014757/0887 |

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| 24 | 7,333,714 | BU3338 | METHOD AND SYSTEM FOR PERFORMING REVERSE PLAY OF SD MPEG VIDEO | 2/19/2008 | 014647/0021 |
| 25 | 7,653,135 | BU3378 | MPEG FIELD DATA-DRIVEN DISPLAY | 1/26/2010 | 016297/0268 |
| 26 | 7,689,852 | BU3271 | METHOD AND SYSTEM FOR PROVIDING POWER MANAGEMENT FOR AN INTEGRATED GIGABIT ETHERNET CONTROLLER | 3/30/2010 | 015115/0655 |
| 27 | 7,565,462 | BU2007.1C | MEMORY ACCESS ENGINE HAVING MULTI-LEVEL COMMAND STRUCTURE | 07/21/2009 | 014295/0066 |
| 28 | 7,920,624 | BU2017.1 | INVERSE QUANTIZER SUPPORTING MULTIPLE DECODING PROCESSES | 4/5/2011 | 014309/0949 |
| 29 | 7,630,566 | BU2065 | METHOD AND APPARATUS FOR IMPROVED ESTIMATION AND COMPENSATION IN DIGITAL VIDEO COMPRESSION AND DECOMPRESSION | 12/8/2009 | 013424/0660 |
| 30 | 7,111,127 | BU3059 | SYSTEM FOR SUPPORTING UNLIMITED CONSECUTIVE DATA STORES INTO A CACHE MEMORY | 9/19/2006 | 014558/0363 |

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| 31 | 7,472,057 | BU3098 | DETECTOR FOR USE IN VOICE COMMUNICATIONS SYSTEMS | 12/30/2008 | 014340/0616 |
| 32 | 7,133,046 | BU3148 | SYSTEM, METHOD, AND APPARATUS FOR DISPLAY MANAGER | 11/7/2006 | 014217/0180 |
| 33 | 7,843,825 | BU5783 | METHOD AND SYSTEM FOR PACKET RATE SHAPING | 11/30/2010 | 020377/0001 |
| 34 | 7,869,779 | BU5868 | METHOD AND SYSTEM FOR PROCESSING CHANNELS IN A FM COMMUNICATION SYSTEM | 1/11/2011 | 019536/0395 |
| 35 | 7,873,332 | BU5915 | METHOD AND SYSTEM FOR MITIGATING A VOLTAGE STANDING WAVE RATIO | 1/18/2011 | 018886/0616 |
| 36 | 6,990,195 | BU1353 | VOICE AND DATA EXCHANGE OVER A PACKET BASED NETWORK WITH RESOURCE MANAGEMENT | 1/24/2006 | 011160/0310 |
| 37 | 6,795,088 | BU1574.1 | METHOD AND SYSTEM FOR MORE EFFICIENTLY UTILIZING PROCESSORS OF A GRAPHICS SYSTEM | 9/21/2004 | 012811/0558 |

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| 38 | 6,621,362 | BU1815 | VARACTOR BASED DIFFERENTIAL VCO BAND SWITCHING | 9/16/2003 | 011835/0144 |
| 39 | 6,927,606 | BU1883D1 | Low voltage differential to single-ended converter | | 011743/0686 |